

# Notes on Some Malaysian Melastomaceae

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WHILE ARRANGING the specimens of MELASTOMACEAE from the herbaria of Singapore and Sarawak, certain systematic anomalies or confusions that were noticed, were cleared to form the subjects of these notes. These may be summarised as follows:—

## GENERA:

A new genus ANPLECTRELLA has been established for the anomalous species hitherto known as *Anplectrum anomalum*. Reasons have been adduced to conserve MARUMIA Bl. (1831) against MARUMIA Reinwdt. ex Bl. (1825 ?) and ex Reinwdt. (1828) and to reject MACROLENES Naud. ex Miq. (1858), a dubious genus when published and later reduced to MARUMIA Bl. (1831) when discovered to be congeneric.

## SPECIES:

(a) **Spec. nov.**: *Dissochaeta hirsutoidea*, *D. johorensis*, *D. malayana*, *D. marumioides*, *D. stellulata* and *D. tawaensis*.

Excepting *D. marumioides*, all these species are elements that were being confused in herbaria or literature with *D. hirsuta* Hk. f. which has been typified here. In addition *D. densiflora* and *D. porphyrocarpa* were established by Ridley on the material also confused with *D. hirsuta*.

(b) **Nom. nov.**: *Memecylon megacarpum* (*M. pulchrum* Cogn., non Kurz.).

(c) **Comb. nov.**: *Anplectrella anomala* (*Anplectrum anomalum*).

(d) **var. nov.**: *Diplectria annulata* var. *seticarpa*.

(e) **Syn. nov.**: *Anplectrum lepidosetosum* and *A. crassinodum* (*Diplectria annulata*); *Dissochaeta celebica* partim (*D. rubiginosa*); *Marumia reticulata* Bl. (*M. pachgyna*), *M. rufolanata* (*M. stellulata* (Jack) Bl.); *Medinilla polyanthum* and *M. quadrifolia* (*M. radicans*); *Memecylon elmeri* and *M. heteropleurum* var. *olivaceum* (*M. maingayi*), *M. longifolium* (*M. wallichii*).

(f) **Loc. nov.**: *Dissochaeta ramosii*; *Marumia ciliatiloba*; *Medinilla pterocaula* (*M. crassinervia* partly), *M. radicans* (*M. crassinervia* partly); *Memecylon acuminatum*, *M. hepaticum*, *M. multiflorum* and *M. paniculatum*.

**Anplectrella** Furtado **gen. nov.**

Ab omnibus generibus ad Tribum Dissochaeteae pertinentibus inter alias hoc differt: calyce tubuloso truncato fauce paululo dilatato; staminibus 8, omnibus aequalibus, fertilibus, connectivo dorso breviter hastato producto, ventre in appendices duos longos lineares subulatos exeunte; bacca globosa in vertice in calycis limbo truncato tubuloso angustiore cincta. *Diflectriae* affinissima.

1. **Anplectrella anomala** (Stapf et King) Furtado **comb. nov.**

*Anplectrum anomalum* Stapf et King in King, Mat. Flor. Mal. Pen. III (1900) 467; Ridl., Fl. Mal. Pen. I (1922) 800: basionym.

**MALAYA:** Perak, Gopeng (Kunstler 5,779, syntype). **Johore,** Mawai (Corner 30,876 & s.n.); Layang-Layang at Rengam (H. M. Burkill 1,792); Layang-Layang on Bukit Badak (Hassan & Kadim 13); Sungei Kayu (Kiah 32,061).

**SUMATRA:** Indragiri at Muara Padjanki (Buwalda 6,431).

Field notes by Corner suggest that this is a frequent climber in the swampy forest, but generally grows so high up on trees that its specimens are not easily collected. Kunstler's notes imply that the climber is a saprophyte or semiparasite, growing on the tops of large trees and producing roots that encircle tree branches. Possibly all collections were made when the trees were cut down; Burkill, and Hassan and Kadim note that their collections were from forest felling areas.

Corner notes: "Twigs, undersurface of leaves and inflorescence rusty scurfy. Leaves yellowish green beneath, the sides curved slightly backward i.e. 'subconchate'. Calyx green, brown-scurfy. Petals greenish white, strongly reflexed against pedicel. Filaments white; anthers and appendages pink; anther pores white. Style pink with white stigma."

Corner's unnumbered specimen is sterile and its leaves differ somewhat from the adult ones, in that they are quintuplinerved and almost panduraeform with a broad rotundotruncate base; but there are transitions towards the adult forms which are triplinerved narrowed towards the base.

**Diplectria**

2. **Diplectria annulata** (Triana) O. Kuntze, Rev. Gen. Plant (1891) 246.

*Anplectrum annulatum* Triana in Trans. Linn. Soc. XXVIII (1871) 84; Clarke in Hk. f., Fl. Brit. Ind. II (1879) 546; Cogn. in DC., Mon. Phan. VII (1891) 569; **basionym.**

*A. lepidosetosum* King, Mat. Fl. Mal. Pen. III (1900) 464; Ridl., Fl. Mal. Pen. I (1922) 799 **Syn. nov.**

*A. crassinodum* Merr. in Univ. Calif. Publ. Bot. XV (1929) 223. **Syn. nov.**

**MALAYA:** **Penang**, Government Hill alt. 160 m. (Curtis 1078); Government Hill by Old Main Road, alt. 400 m. (Curtis = 1078) Balek Pulau (Ridley & Curtis 7,949; Ridley 9,413). **Perak**, Temango (Ridley in VII-1909). **Pahang**, Bentong (Burkill and Haniff 16,727 as Kayu Mata Hari, sterile). **Selangor**, Kuala Lumpur (Curtis in II-1890); Seminyih (Hume 7,938 & 8,305); Ginting Simpah (Strugnell 13,618); Kepong (Pawanchee & Lela 13,652). **Malacca**, Ayer Panas (Goodenough & Ridley 1574). **Johore**, Batu Pahat on Bukit Patani (Ridley in 1900). **Singapore**, Pulau Ubin (Ridley in 1893).

**SUMATRA:** **Asahan** at Huta Bagasan (Rahmat 7212).

**BORNEO:** **North Borneo**, Tawao (Elmer 21,291, typus of *A. crassinodium*). **Sarawak**, Limbang (Haviland c.o.c.h. & c.o.c.k. [544 ?] SAR).

*Anplectrum* A. Gray is not usable to Malaysian plants cf. Bakhuizen f. in Med. Bot. Mus. Utrecht 91 (1943) 26.

Ridley 12,253 referred by Ridley (Kew Bull., 1946 p. 32) to this species, is *D. cyanocarpa* (Bl.) O.K. In Singapore the material is sterile.

3. **Diplectria annulata** (Triana) O.K. var. **seticarpa** Furtado var. nov.

A. varietate typica haec differt baccis setosis.

**MALAYA:** **Kelantan**, Sungei Terang (Henderson 29,646). **Trengganu**, Dungun (Sinclair & Kiah 40,491); Ulu Brang (Moysey & Kiah 33,853). **Pahang**, Sabai Estate near Bentong (Md. Shah 176—holotypus in SING); Sungei Pertang by Ulu Tembeling (Henderson 22,121).

**Dissochaeta**

4. **Dissochaeta densiflora** Ridl. in Kew Bull. (1946) 32.

*D. hirsuta* Hk. f. *sec.* Merr. in Univ. Calif. Publ. Bot. XV (1929) 224 p. parte.

**BORNEO:** **Sarawak**, Saribas Paku by Sungei Plandok (Haviland 1550, isoholotype in SAR); Sungei Mayeng (Purseglove; calyx pink, corolla white, anthers pink); Sassa by Sungei Tau (calyx and petals pink); Gat, Upper Rejang River (Clemens 21,569 & 21,139 in SAR); Kalaka (Dyak Collector on 10-IV-1893-SAR).

The indumentum in the lower surface is somewhat variable and deciduous, so that some leaves are glabrous below except for a few setae on the thicker parts of the main nerves. Similarly the presence of tomentum and setae on the calyx seem to vary also. In the holotype collection which bears flowers only but no fruit, there are some calyces showing setae in the tubular portion; in other specimens (e.g. Dyak and Purseglove) there are young fruits which are almost non setose, while others are much setose, the setae being pallid at first and blackish later. In Clemens 21,569,



the fruit is ripe, much setose, 5 mm. long, campanulate, with reflexed calyx lobes and leaves almost glabrous below, some leaves being obovate. In Clemens 21,139 fruits are as on the previous one but the internodes are quite glabrous in some parts. In every case the petioles are setose and sometimes also the nodes.

The species may be confused easily with some forms of *Diplectria divaricata* (Willd.) O.K. (Anplectrum).

5. **Dissochaeta hirsuta** Triana in Trans. Linn. Soc. XXVIII (1871)

83; Cogn. in DC., Mon. Phan. VII (1891) 556; Merr., Enum. Born. Pl. (1921) 446 et in Univ. Calif. Publ. Bot. XV (1929) 224 pro parte. **Fig. 2-A.**

BORNEO: **Sarawak**, Kuching (Haviland = 2036 on 18-1-1893 and s.n. on 5-V-1893); Mount Singhie (Haviland 2036 in SAR).

There is a good deal of confusion regarding this species so that any *Dissochaeta* sp. from Borneo, Malaya or Sumatra having setae on branchlets, calyx, and the two surfaces of the leaves is referred to it. Ridley (Kew Bull. 1946 p. 32) established *D. porphyrocarpa* on the Kinabalu specimens that were referred to this species by Stapf in Trans. Linn. Soc. Bot. IV (1894) 150.

The type of the species was a specimen in fruit collected in Labuan by Motley. After comparing his specimens with the type, Haviland noted on his sheet No. 2036 (from Mt. Singhie in the Sarawak herbarium) the following: "Leaves typical; type has no flowers, young fruit only." Unfortunately the Sarawak specimen has neither flowers, nor fruit, but the flowering duplicates might have been donated to other herbaria, for Haviland's field notes show that the calyx teeth are red and its petals white, (perhaps those mounted Haviland 1288 (*D. porphyrocarpa* Ridl.) might belong here). However Haviland's specimens collected in Kuching have similar foliage; in addition they bear flowers and young fruit (Haviland = 2036) or more developed fruit (Haviland s.n.). Hence the following notes may be usefully recorded here.

The bristles present on the stem, leaves, petioles, peduncles, bracts and calyces are long ( $\pm$  3 mm.), soft, tending to be greyish and do not impart rough or asperous characters to parts as do the short, rigid setae in *D. porphyrocarpa* Ridl. *Leaves* long setose on both surfaces, ovate, acuminate, rounded often cordulate at base, 9-15 cm. long, 4-8 cm. broad, 5-nerved, or 7-nerved including the submarginal collective nerves; petiole 10-15 mm. long. *Inflorescence* terminal, primary branches bearing generally 3 pairs of secondary branches, flowers borne on tertiary or quaternary branchlets. *Bracts* and bracteoles similar, variable rarely narrow linear, generally ligulate or spatulate, rounded at apex, narrowed towards the base, fimbriately hirsute along the margins, larger ones about 10 mm. long, 3-4 mm. broad; smaller ones  $\pm$  3 mm. long. *Calyx* campanulate, 5-6 mm. in tube, hirsute, (less hirsute in fruit); lobes narrowly ovate or ligulate, rounded at apex, hirsute with long patent setae along the margins, setae absent in the dorsum.



*Petals* glabrous except a few bristles at the tip, easily noticed in the bud. *Fruit* subglobose, 5–6 mm. long, about 4 mm. in diam., yellowish when dry, constricted below the calyx rim having persistent, reflexed calyx lobes. *Young twigs*, peduncles, pedicels, bracts and calyx bear dense, deciduous white tomentum of minute stellate-hairs.

Haviland's notes on the Kuching sheets state that bract and calyx are pink.

*D. porphyrocarpa* has very short, rigid hairs, calyx densely hirsute, lobes narrow, acuminate, petals pink.

6. ***Dissochaeta hirsutoidea* Furtado spec. nov. Fig. 2–C.**

A *D. hirsuta*, quacum facile confusa, differt inter alias: foliis supra parcissime setosis, deciduo minute stellato-pubescentibus, subtus eodemmodo vestitis, supra hirsutioribus; bracteis inconspicuis, brevioribus, linearibus, setosis, premature deciduis; calycibus in lobos angustiores breviores fere lineares divisis, petalis in alabastro singulis 2–5-setosis; bacca vertice annulo calycis minuto et lobis inter se distantibus reflexiusculis, caducis coronata. A *D. stellulata* foliis pro rata angustioribus, lobis calycis angustioribus longioribusque, bracteis citius deciduis sat distincta.

BORNEO: **North Borneo**, Bettotan prope Sandakan (Boden-Kloss 19,156—holotypus in SING.) **Sarawak**, Matang, 250–400 m. alt. (Hullett, 18-VII-1890).

The specimens have been referred to *D. hirsuta*, from which, however, this is distinguished by the presence of minute stellulate, deciduous hairs on both surfaces of the leaf; short, linear bracts which fall off very early in the life of the flower; short, almost linear calyx lobes and more setae on the petals in the bud. From *D. stellulata* this is distinguished by the leaves being proportionately narrower and calyx lobes being narrower and longer. Boden-Kloss notes that the plant is a climber with white flowers and pink-tipped stamens.

7. ***Dissochaeta intermedia* Bl. in Flora XIV (1831) 493 et Mus. Bot. Lugd.-Bot. I (1849) 35 fig. 5; Clarke in Hk. f., Fl. Brit. Ind. II (1879) 544 p.p.; King, Mat. Fl. Mal. Pen. III (1900) 462 p.p.; Ridl., Fl. Mal. Pen. I (1922) 788 p.p.**

*D. pallida* Bl. sec. King, op. cit. III (1900) 52 & Ridl., op. cit. I (1922) 797 partim.

*D. scortechinii* King, op. cit. III (1900) 464; Ridl., op. cit. (1922) 798 **syn. nov.**

**MALAYA: Pahang**, Telom (Ridley 13,680); Cameron Highlands alt.  $\pm$  1200 m. (Nur on 3–V–1937); Sungei Bertam alt.  $\pm$  1200 m. (Henderson 11,129); Fraser's Hill, alt. 1300–1400 m. (Burkill & Holttum 8,553 & 8,646; Purseglove 4,112; Shah & noor 621). **Perak**, Maxwell Hill, alt. 1200–1500 m. (Ridley & Curtis 5241 and in VI–1893; Ridl. in VI–1893; Sinclair 38,696;

Burkill and Haniff 12,941; Fox 178 as *Akar Sular*); Larut Hill (Curtis on 25-XII-1901); Ulu Batang Padang (Ridley in Nov. 1908); loc. incert. (Scortechini s.n.); Padang Rangas (Curtis 1301, syntype of *D. scortechinii*).

There has been a great deal of confusion about this species. Stapf showed that most of the Malayan specimens referred to this species and Helfer 2,286 from Tenasserim are *D. rubiginosum* Stapf. *D. scortechinii* King was based on specimens bearing young inflorescences. The Pahang specimens are usually more glabrous and have slightly larger fruits.

**8. *Dissochaeta johorensis* Furtado spec. nov. Fig. 2-B.**

*D. hirsuta* Triana *sensu* King, Mat. Fl. Mal. Pen. III (1900) 51 & Ridl. Fl. Mal. Pen. I (1922) 797; quoad specimina johorensis tantum.

A *D. hirsuta* partibus vegetativis omnino modice vel luteo-brunnescentibus; foliis angustioribus cum nervulis lateralibus inter se remotioribus; bracteis brevissimis inconspicuis premature deciduis; calycibus elongato urceolatis longioribus in tubo 7–9 mm. longis, in lobos 3–4 mm. longos, angustissime triangulares vel fere lineares acutos, dorso setosos, margine haud vel breviter fimbriatos divis; fructibus urceolatis, majoribus, 8–10 mm. longis, circa 5 mm. in diam., apice cum lobis calycis reflexis

**MALAYA:** **Johore**, Sungei Kayu (Kiah 32,357—climber, flowers pink); Gunong Muntahak alt. 200 m. (Nur 19,975, climber, flowers pink); Lombong (Burkill 1,822, straggly bush up to 15 ft., flowers pink); near Gunong Panti (Ridley 41,185—flowers pink—holotypus in SING).

The minute, stellate brownish pubescence is present almost in all vegetative parts and on the calyx, it is deciduous though falls very early from the upper surface of the leaves.

**9. *Dissochaeta malayana* Furtado spec. nov. Fig. 2-D & E.**

A *D. johorense*, *quacum facile confusa, haec species differt: setis ramulis minoribus paucioribusque, saepe atrescentibus; calycibus urceolatis infra faucem validiore cinctis, apice truncatis vel in lobos brevissimos obtuso triangulares divis; fructibus 8–10 mm. longis urceolatis apice dilatatis margine eversiusculis.*

**MALAYA:** **Trengganu**, Ulu Brang, alt. 400 m. (Moysey & Kiah 33,858); Dungun (Sinclair & Kiah 40,492). **Kemaman**, Bukit Kajang, alt. 350 m. (Corner 30,381—Holotypus in SING); *ibid*, alt. 150 m. (Corner s.n.). **Selangor**; Ginting Simpah alt. 600 m. (Hume 9,131 & 9,287).

In leaves and the general shape and size of flowers and fruit, this species is easily mistaken for *D. johorensis*, but calyx is obscurely lobed or almost truncate (cf. Hume 9,131); the hair on the stem and on the upper leaf surface are shorter and fewer and tend to be dark and even to fall off. In both these species



the setae are fewer and shorter on the lower leaf surface than in *D. hirsuta* and tend to fall off early or be suppressed. In both, the lateral nerves of the leaves are also more distant than in *D. hirsuta*.

On the field label of the holotype specimen Corner notes as follows: Petals pink. Filaments yellow. Anthers pinkish purple. Style pale pink, white at base. Calyx and pedicels green with purple hairs. An additional bit of information is given on Corner's unnumbered specimen that hairs on stem and inflorescence are purple.

Sinclair and Kiah's field notes are as follows: Climber. Common on roadside in forest. Petals and staminodes pink-purple. Filaments and anthers yellow. Hairs on calyx and ovary pinkish purple.

10. *Dissochaeta marumioides* Furtado sp. nov. Fig. 1.

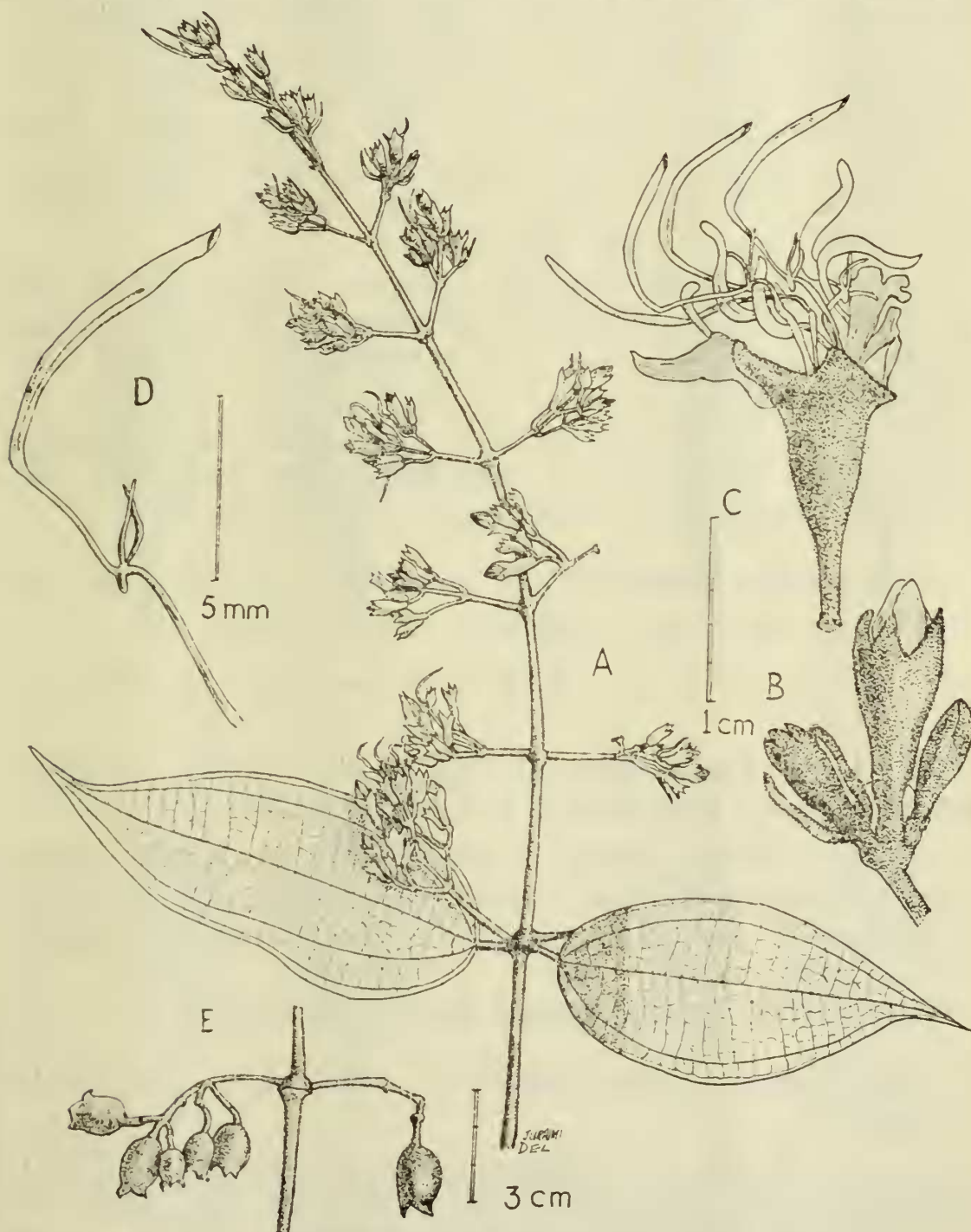


Fig. 1. *Dissochaeta marumioides* Furtado (Johnston 86-holotypus).

A, Panicula floriferens cum foliis basalibus. B, Spicula cum alabastris juvenilibus. C, Flos. D, Stamen fertile. E, Paniculae pars cum fructibus.

*A D. pallida* cui affinissima indumento magis rudi densoque griseolo, calycibus longioribus apice valde lobatis, fructibus majoribus vertice limbo calycis lobata cinctis haec species facile distinguenda.

*Frutex* erectus vel semi-scandens, bimetralis, ramulis teretibus vel obscure quadrangularibus, dense stellato tomentosis. *Folia* ovato oblonga, 5-nervia, basi rotundata, apice acuminata, 10–15 cm. longa, 5–7 cm. lata, supra glabra olivacea reticulationibus invalidis impressis, subtus omnino dense stellatotomentosa brunneo-albescentia, reticulationibus sicut nervis prominentibus; petiolus circa 1 cm. longus, eodemmodo tomentosus. *Inflorescentia* axillaris ad 10 cm. longa vel terminalis, pedunculis pedicellisque quadrangularibus dense stellato tomentosis. *Bractae* linearis, 10–15 mm. longae, dense tomentosae. *Calyx* circa 10 mm. longus, obscure quadrangularis vel longitudinaliter rugosus, basin versus attenuatus, in limbo dilatatus, profunde lobatus, lobis circa 4 mm. longis, triangularibus acutiusculis, omnino eodemmodo tomentosus. *Stylus* post anthesin erectus, apicem versus paulo reflexus, glaber, 10–14 mm. longus, vertice truncatus. *Fructus* ellipsoideus, griseo stellato-tomentosus, 10–15 mm. longus, 8–10 mm. in diam., vertice limbo calycis basi annulato apice lobato cinctus.

**MALAYA:** **Pahang**, Cameron Highlands, 1300–1500 m. alt. Tanah Rata (A & M. Johnston 86-holotypus in SING); Kamunting Road, new Golf Course (A & M. Johnston 22); Robinson Falls (A. M. Burkill 750).

“Thickly sprawling bush to 6 ft. high. Sepals brown, thickly scurfy. Petals pink.” (H. M. Burkill). “Large bush with long pendent branches. Fruit black, fleshy.” (Johnstons 86).

11. **Dissochaeta ramosii** Merr. in Journ. Roy. Asiat. Soc. Str. Br. 86 (1922) 340 & Univ. Calif. Publ. Bot. XV (1929) 224.

*D. annulata* Triana sec Stapf in Trans. Linn. Soc. Bot. IV (1894) 159.

**MALAYA:** **Perak**, Maxwell Hill (Ridley s.n. in VI-1893). **Pahang**, Fraser’s Hill (Burkill & Holttum 8,628).

**BORNEO:** **North Borneo:** Tawaran (Haviland 1,385—SAR); Sabah (Creagh s.n.—SAR); Kabili (Enggoh 7,270), Sandakan (Ridley s.n. in 1897 & Elmer 20,106). **East Borneo**, East Kutei (Kostermans 5,452).

This was not recorded outside British North Borneo.

12. **Dissochaeta rubiginosa** Stapf in Journ. Linn. Soc. XLII (1914) 79.

*D. intermedia* Bl. sec. Clarke in Hk. f., Fl. Brit. Ind. II (1879) 544; Cogn in DC., Mon. Phan. VII (1891) 562; King, Mat. Fl. Mal. Pen. III (1900) 462: omnino pro parte.

*D. celebica* Bl. sec. Ridl., Fl. Mal. Pen. 1 (1922) 798 p.p.



MALAYA: Penang, Batu Ferengy (Curtis = 2,433); Government Hill (Curtis 2,433: VI-1890: XII-1892; V-1895): Tulloh Bahang (Curtis 2,433).

Since the specific epithet was taken from *Melastoma rubiginosum* Wall. Cat. n. 4052 partim from Penang, the species may have to be typified on Wallich's specimen, though the author included among the syntypes specimens from Burma and Borneo also. Curtis numbered more than one collection as 2,433 instead of " = 2,433".

13. *Dissochaeta stellulata* Furtado spec. nov. Fig. 2-F.

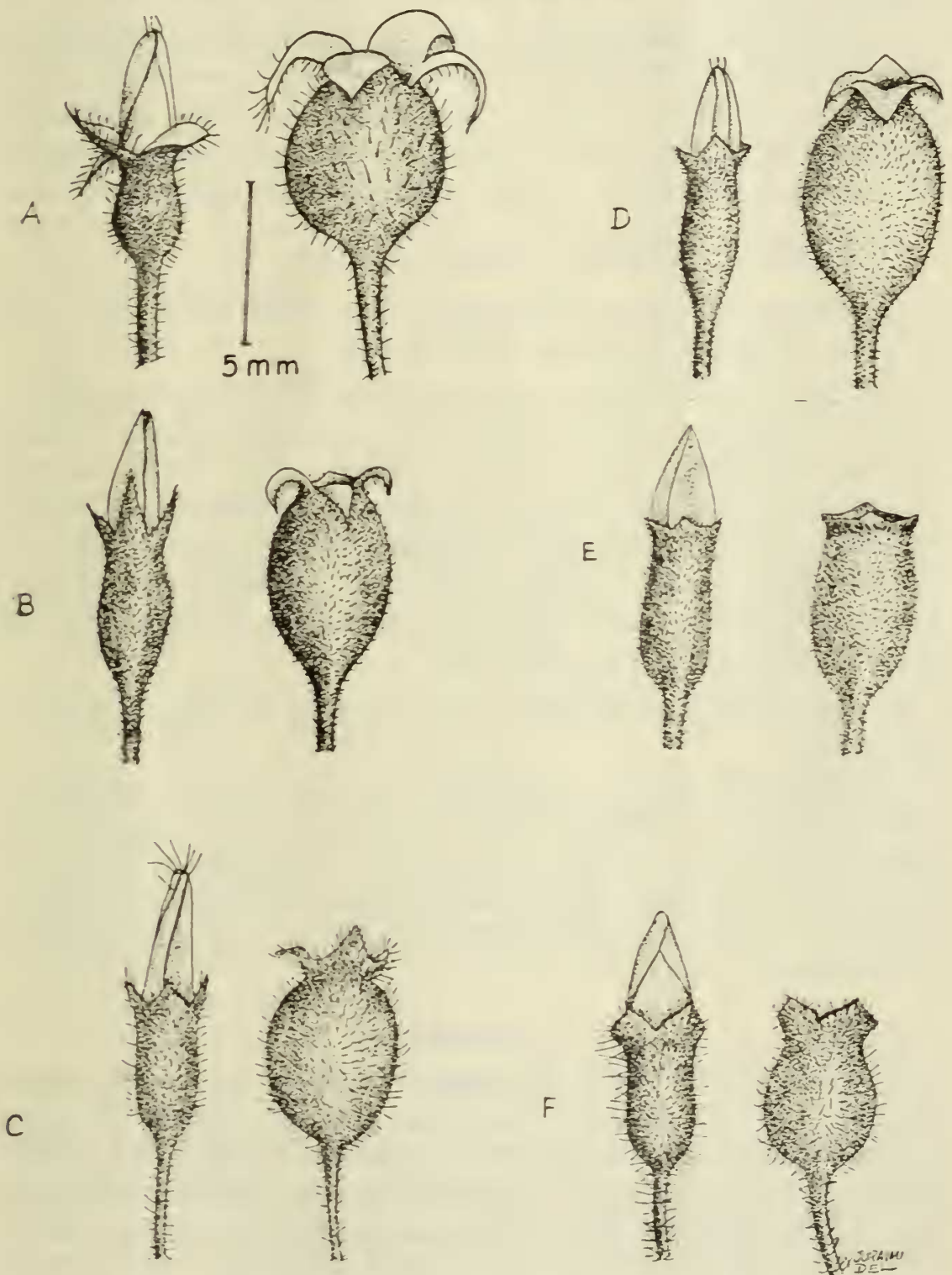


Fig. 2. *Alabastra* fructusque ex nonnullis speciebus cum *Dissochaeta hirsuta* confusus. A. *hirsuta* (Haviland 2036-SAR). B. *johorensis* (Ridley 4,185-typus). C. *hirsutoidea* (Boden-Kloss 19,156-typus). D. *malayana* (Corner 30,381-typus). E. *malayana* (Hume 9,131-calycis apex a typico paulo divergens). F. *stellulata* (Haviland 862-typus in SAR).

A *D. hirsuta*, cui similima, haec species differt: ramulis, foliis, pedunculis, pedicellis calycibusque omnino setosis et minute brunnescentequae stellulato pubescentibus; foliis paulo minoribus, pro rata latioribus, supra setis paucissimis et pubescentia mox decidua praeditis; calycibus apice in lobos obtusiusculos brevissimos, triangulares divisis; bracteis linearibus, mox deciduis; bacca paulo minore, vertice calycis lobis breviter triangularibus praedita.

BORNEO: **Sarawak**, Sadang (Haviland 862: d: t: m: g:—holotypus in SAR); Santubong (Ridley in IX-1905); Samarahan (Brooke 9,669).

This species is easily mistaken for *D. hirsuta*, but is readily distinguished by the brownish stellulate hairs in between the setae on the lower surface of the leaves and the twigs, peduncles, pedicels and calyces, and also by the obscure triangular lobes of the calyces and the fruit, as well as by the linear deciduous bracts.

#### 14. *Dissochaeta tawaensis* Furtado spec. nov.

*D. hirsuta* Triana sec. Merr. in Univ. Calif. Publ. Bot. XV (1929) 224 quoad specimen infra citata.

*D. johorensis* et *D. malayana*, quibus valde affinis, sed differt: ramulis brevissime setosis; foliis subtus esetosis, punctis minutis brunneis stellulato-puberulis sparse vestitis; supra setosis sicut in *D. johorensis*, deciduo minute punctulatis; bracteatis papyraceis, linearibus, esetosis vel margine apiceque paulo setosis, ad 10 mm. usque longis, deciduis; floribus minoribus; calycibus circa 6 mm. longis, campanulatis vel conicis, margine esetosis, in lobos obscurōs apice esetosos vel 1-2 setosos divisis.

BORNEO: **North Borneo**, Tawao (Elmer 21,426—Holotypus in SING).

This might be easily confused with the two Malayan species, *D. johorensis* and *D. malayana*, but the hair are much smaller, the leaves bear no setae in the lower surface, the bracteoles are linear, papery and practically non-setose, flowers with smaller campanulate or conical calyx having obscure lobes which are esetose except at the apices.

### Marumia

The genus MARUMIA Reinwardt was a *nomen nudum* when BLUME adopted it in his *Cat. Gew. Buitenz.* (1823) 79 to list some Ternstroemiaceae species for which SAURAUIA Willd. (1801) is the correct generic name and for which REINWARDTIA Bl. was validated by Nees (1824). Apparently two years later, in *Flora VIII* (1825) 103, BLUME himself supplied a valid description of MARUMIA Reinw. In 1828 REINWARDT (Syll. Pl. Ratisb. II p. 10) provided his own description to the genus MARUMIA Reinw. Since MARUMIA Reinw. could not be used as the correct name for the genus, BLUME adopted the same name again



for a new Melastomaceous genus he created in 1831 (Flora XIV p. 504), a name that has been widely used since then, even though it was recognized that it was a later homonym.

Its only synonym MACROLENES Naudin (1857) has a peculiar history. Naudin created it as a nomen nudum to a separate Malaysian species that was associated with genera connected with American plants and the identity of which was not easily determined. The plant was first figured and described as *Majeta annulata* Ventenat (1803) and later transferred to a newly created genus HUBERIA DC. (1828) with some doubt as to its precise generic position. NAUDIN (1851) who revised Melastomaceae, maintained MARUMIA as valid genus and though he created the new species *Marumia echinulata* Naud., he did not know where to place Ventenat's species from Java. However, being convinced that it could not be retained in the genera that are exclusively American, he transferred the Javan species to MACROLENES but failed to define the genus.

In 1855 MIQUEL (Fl. Nederl. Ind. I p. 557) who had to give an account of every species found in Indonesia, failed to identify the species, obviously because both the description and the figure given by VENTENAT were defective. Hence not only did he retain *Marumia* Bl. (1831) as the correct generic name for 12 species he described in this work, but provided an incomplete description for MACROLENES, labelling it a doubtful genus accepted by NAUDIN for *Majeta annulata* Vent. and noting that it was probably a species of *Dissochaeta*. In 1865 BENTHAM & HOOKER (Gen. Plant. I, 2, p. 757) recognised VENTENAT's species definitely as a species of MARUMIA and reduced MACROLENES to the synonymy of MARUMIA Bl. (1831) non Reinw. (1828). In 1871 TRIANA in his monographic revision made the new combination *Marumia annulata* (Vent.) Triana. MACROLENES continued to be reduced in all subsequent revisions and floristic works until 1943 when BAKHUIZEN VAN DER BRINK, Jr. rejected *Marumia* Bl. as a later homonym of *Marumia* Reinw. and adopted *Macrolenes* Naudin ex Miq. as the correct name of the genus.

However since his work is not well known and is not monographic, since MARUMIA Bl. has been used for more than a century in several Floras and monographic revisions and since MACROLENES Naud., when validated, was published as a doubtful genus and incompletely described, there is, in my view, a good reason for conserving *Marumia* Bl. (1831) against *Marumia* Reinw.

15. **Marumia ciliatiloba** Baker f. in Journ. Bot. LXII Suppl. 1, (1924) 40.

*Macrolenes ciliatiloba* (Baker f.) Bakh. f. in Mededeel. Bot. Mus. Utrecht 91 (1943) 215.

MALAYA: **Pahang**, Batu Talam in Raub (Burkill and Haniff 16,998, vern. nom: *Akar Sundok*, the leaves are rubbed for scald in hot water). **Trengganu**, Ulu Brang (Moysey & Kiah 33,835).

This is the first record for Malaya. The Pahang specimen is sterile.

16. **Marumia cf. impressa** Craib in Kew Bull. (1930) 321.

I refer here with some doubt Kunstler 224 from Gunong Panti, Johore. It was cited by King under *Dissochaeta annulata* Hk. f. It has deeply lobed calyx and leaves having impressed nerves and veins above, where the leaves dry greenish yellow. The leaves resemble somewhat those I have doubtfully referred to *M. zeylanica*, but the stellate hairs here are ferrugineous red and calyx and other parts bear no traces of prickles. Its affinity lies with *M. nemorosa*, but is totally different. It must be compared with the type of Craib's species.

17. **Marumia pachygyna** Korth., Verh. Nat. Gesch. Bot. (1839–42) 242 t. 59; Cogn. in DC., Monogr. Phan. VII (1891) 552; Stapf. in Trans. Linn. Soc. Bot. IV (1894) 159.

*M. reticulata* Bl., Mus. Bot. Lugd.-Bat. I, 2 (1849) 34; Cogn. in op. cit. VII (1891) 551. **Syn. nov.**

*M. stellulata* Korth. in op. cit. (1839–42) 243, non Bl. (1831).

*Macrolenes stellulata* (Bl.) Bakh. f. in Mededeel. Bot. Mus. Utrecht 91 (1943) 216 pro parte borneense.

*M. reticulata* (Bl.) Bakh. f. in op. cit. (1943) 215. **Syn. nov.**

SUMATRA: **Asahan** (Rahmat 7,612).

BORNEO: **East Borneo**: Nunukan (Meijer 2,193). North Borneo: Kinabalu Mt. at Penokok, alt. 1,000 m. (Haviland 1,345); Sandakan: at Elopura (SAN: A.774 & A1,118); Sepilok (Castro 4,502; Keith A1,963); Tawao (Elmer 20,241; 20,548 & 21,540). **Sarawak**, Gat. Upper Rejang river (Clemens 21,594 in SAR); Mt. Matang (Clemens 20,933 in SAR: Haviland s.n. & 146; Ridley s.n.); Sana by Sungei Tau (Purseglove 5,112); loc. incert. (Hullett s.n.). **Brunei**: Bukit Puan (Sinclair & Kadim 10,484); Kuala Ingei (Ashton, BRUN. 151).

Korthals depicts leaves which are clearly biglandulose at the base of their lower surface and shows the calyx hairs with long branches at the top, the two characters which Bakhuizen states to be peculiar of *M. reticulata* and not of *M. stellulata*. Yet he has reduced *M. pachygyna* to *M. stellulata*.

The Brunei specimens quoted above have somewhat smaller flowers with shorter calyx lobes and petals; but they are specifically identical with the other material.

*M. reticulata* from the Malay Peninsula is different see note under this species.



18. *Marumia reticulata* Bl.

Clarke (Hk. f. Fl. Brit. Ind. II, 1879 p. 542). King (Mat. Pl. Mal. Pen. III, 1900 p. 457) and Ridley (Fl. Mal. Pen. 1, 1922 p. 795) describe under this name a species which bears simple prickles on the stem, peduncles and calyx, whereas true *M. reticulata* has non-setose stems and peduncles and the setae on the calyx are branched or stellate at the apex. We have specimens that would agree with this description, viz:

Ridley s.n. from Serom, Johore (Nov. 1900), Henderson 24,057 from Tasek Bera, Pahang, and Strugnell 13,965.

All these bear dense, dirty ferrugineous or ochraceous, more or less deciduous hairs on young branches, petioles, calyx and also on the lower surface of the leaves. The leaves are ovate lanceolate in shape, acuminate at apex, and rounded, cordulate at base and slightly deciduously pubescent above at first. On drying the leaves become greenish yellow above where the nerves, veins and venules all become sunk. Prickles on the young stem and peduncles are very sparse and often weak deciduous; the pubescence and prickles on the calyx are much stronger and persistent. Bracts are linear entire, furfurascens. Flowers are axillary and terminal, usually 3-5 on each lateral peduncle. The specimens seem to be referable to *Marumia zeylanica* Bl. or *M. dimorpha* Craib. Unfortunately I am unable to compare.

19. *Marumia stellulata* (Jack) Bl. in Flora XIV (1831) 503; Cogn. in DC, Monogr. Phan. VII (1891) 552.

*M. rufolanata* Ridl., Fl. Mal. Pen. V, Suppl. (1925) 310. **Syn. nov.**

*Macrolenes stellulata* (Jack) Bakh. f. in Mededeel. Bot. Mus. Utrecht 91 (1943) 216 pro parte typica.

*Melastoma stellulata* Jack in Trans. Linn. Soc. XIV (1825) 6; DC, Prodr. III (1828) 148: **basionym**.

MALAYA: **Kelantan**, Bukit Batu Papan (Henderson 29,504). **Pahang**, Gunong Tahan (Kiah 31,760); Kuala Lipis (Burkill & Haniff 15,661, isoholotype of *M. rufolanata*).

Bracts in this species are oblong or spathulate, almost entire or laciniate, but otherwise agrees with the description of *M. stellulata*. Bakhuisen describes the bracts as linear and entire, but he also states that the species show many transitions in almost all characters. Moreover he had included under this species *M. pachygyna*, which produces linear, non-laciniate bracts, but which, unlike *M. stellulata*, has biglandular leaves. JACK stated that in *M. stellulata* the bracts were leaf-like.

In interpreting this species I have followed Haviland who had named his collections after comparing his material with Beccari's duplicates of the specimens named by Cogniaux and others, and also Kew's determinations of Haviland's collections.

**Medinilla**

20. **Medinilla pterocaula** Bl. in Flora XIV (1831) 509 et Rumphia I (1835) 12 t. 7; Cogn. in DC., Phan. VII (1891) 575; Bakh. f. in Med. Bot. Mus. Utrecht 91 (1943) 156.

*M. crassinervia* Bl. *sensu* Cogn. op. cit. VII (1891) 576; King, Mat. Fl. Mal. Pen. III (1902) 472; Ridl., Fl. Mal. Pen. I (1922) 804: omnino pro parte.

*M. macrocarpa* Bl. *sensu* Clarke in Hk. f., Fl. Brit. Ind. II (1879) 547 p.p.

**MALAYA: Penang**, Government Hill (Curtis 2,225). **Perak**, Waterfall (Wray 1,821); Batang Padang River (Ridley in Dec. 1908).

**BORNEO: Sarawak**, Kuching (Native collector, 25-IV-1893—SAR; Haviland 9491 (?): d: h: h: a;—SAR, petals white, and 1,962—SAR, petals white, calyx tube pink).

According to Bakhuizen f. (op. cit. p. 159) who examined the types, *M. crassinervia* Bl. is identical with *M. macrocarpa* Bl., though I do not understand why he reduces the latter which was better described and later even illustrated as the synonym of the former which was imperfectly (and erroneously according to Bakhuizen) described and generally confused with other species. Both the names were published simultaneously in the same periodical and *M. macrocarpa* Bl. has been correctly described as a species having calyx split irregularly into lobes. Clarke apparently considered Malayan specimens referred to this species as exceptional since he recognised "Calyx limb even in the bud truncate entire in Maingay's examples" (Malayan).

Malayan specimens agree well with Blume's description and plate of *M. pterocaula* Bl: it has a truncate calyx and its stem is more or less alate or ridged, in some cases the alae being distinctly undulate in the young branches. The Bornean specimens have slightly broader flowers and the two side nerves diverge almost from the base.

21. **Medinilla radicans** (Bl.) Bl. in Flora XIV (1831) 509 et Rumphia I (1835) 15 t. 3: Cogn. in DC., Mon. Phan. VII (1891) 573; Bakh. f. in Med. Bot. Mus. Utrecht 91 (1943) 153.

*M. crassinervia* Bl. *sensu* King, Mat. Fl. Mal. Pen. III (1900) 472 partim; Ridl., Fl. Mal. Pen. I (1922) 804 p.p.

*M. polyanthium* Korth. in Verh. Nat. Gesch. Bot. (1839-42) 245 t. 61. **syn. nov.**

*M. quadrifolia* (Bl.) Bl. in Flora XIV (1831) 509; Cogn. op. cit. VII (1891) 574; **syn. nov.**

*Melastoma quadrifolium* Bl., Bijdr. Flor. Ned. Ind. (1826) 1069.

*Melastoma radicans* Bl., Bijdr. cit. (1826) 1069: **basionym.**



MALAYA: **Pahang**, Fraser's Hill, alt. 900–1200 m. (Burkill and Holttum 7,866; Henderson & Nur 11,101). **Selangor**, Pahang Track (Ridley 8,618); Semangkok Pass (Ridley in VIII–1905). Ginting Simpah (Strugnell 13,006; 13,007 and 27,890). **Singapore**, Bukit Mandai (Goodenough 1,637).

This form with uninerved leaves gradually passes into the one having tri-nerved leaves and so there are no reasons why the two forms should be kept as two species or varieties. Also Blume (1835) mentions that in his *M. radicans* triplinerved leaves occasionally occurs, though in these transversed nerves are not visible. But such leaves have been seen in the specimens which would be referred to *M. radicans*.

Under *M. crassinervia* King referred Ridley, 1637 (= Goodenough 1,637), while Ridley included in addition his Semangkok Pass specimen.

### Memecylon

22. **Memecylon acuminatissimum** Bl. Mus. Bot. Lugd. Bot. I (1851) 360; Cogn. in DC., Monogr. Phan. VII (1891) 1144.

MALAYA: **Kemaman**, Sungei Nipa (Corner on 20–XI–1935); Ulu Bendong at Kajang (Corner 30,017). **Pahang**, Ulu Kuantan (Craddock in 1903); Bentong (Md. Shah 233); **Selangor**, Ginting Simpah (Hume 9,159, 8,910 & 8,481). **Negri Sembilan**, Gunong Angsi (Nur 11,679).

23. **Memecylon campanulatum** C. B. Clarke in Hk. f., Fl. Brit. Ind. II (1879) 563; King, Mat. Fl. Mal. Pen. III (1900) 488; Ridl., Fl. Mal. Pen. I (1922) 818 p.p.

MALAYA: **Kemaman**, Bukit Kajang (Corner 30,479). **Malacca**, Bukit Panchor (I. H. Burkill 3,046). **Johore**, Mawai-Jemaluang Road (Corner 29,021 & 29,044); Sungai Kayu (Kiah 32,057); Bukit Badak in Layang-Layang (Hassan & Kadim 92); Sungei Sedili (Corner 31,942); Sungei Kayu Ara (Corner s.n.).

In leaf characters this species is easily confused with *M. minutiflorum* so that Ridley included here some specimens of that species. *M. campanulatum* has sessile or subsessile inflorescences and its fruit is 6–9 mm. in diam., rough, cylindrico-globose, depressed at both the poles, having its areola much reduced and almost sunk. In *M. minutiflorum* the inflorescence is conspicuously pedunculate, and the fruit depressed globular, crowned by a prominent calyx limb.

24. **Memecylon hepaticum** Bl., Mus. Bot. Lugd.-Bat. I (1851) 357; Cogn. in DC., Mon. Phan. VII (1891) 1151; Bakh. f. in Med. Bot. Mus. Utrecht 91 (1943) 354.

MALAYA: **Johore**, Mawai (Corner 30,882); Mawai-Jemaluang Road (Corner on 4 & 9 Feb. 1935); Mawai-Kota Tinggi Road (Corner 30,976); Sungei Kayu Ara (Corner 29,481); Sungei Kayu (Kiah 31,961; Corner 29,251 & 32,467); Sungei Pelapah Kiri (Corner 32,491).

A shrub or treelet up to 5 m. tall, growing usually in or near swampy places. Fruit pink turning bluish purple when ripe.

Inflorescence is a shortly pedunculate, branched umbel, bearing acute flower buds; calyx campanulate, obscurely toothed or truncate; peduncle one or more in a leaf-axil, 2–4 mm. long, slightly longer in fruit. Our specimens were doubtfully referred to *M. oleaefolium*, *minutiflorum* & *myrsinoides*.

25. **Memecylon maingayi** C. B. Clarke in Hk. f., Fl. Brit. Ind. II (1879) 557; King, Mat. Fl. Mal. Pen. III (1900) 485; Ridl., Fl. Mal. Pen. I (1922) 813.

*M. elmeri* Merr. in Univ. Calif. Publ. Bot. XV (1929) 230 **syn. nov.**

*M. heteropleurum* Bl. var. **olivacea** King, Mat. cit. III (1900) 486 p.p.; Ridl., Flor. cit. I (1922) 814: **syn. nov.**

*M. heteropleurum* Bl. *sensu* Ridl., Kew Bull. (1926) 65; Bakh. f. in Med. Mus. Bot. Utrecht 91 (1943) 349 p.p.

*M. Wallichii* Ridl. in Journ. Roy. Asiat. Soc. Str. Br. 79 (1918) 75 p.p.

This is a very much confused species and specimens have often been referred either to *M. heteropleurum* or to *M. Wallichii*. The former because of King's var. *olivacea* and the latter obviously because this variety was reduced by Ridley to his *M. Wallichii*. In his Flora I (1922) Ridley restored King's variety back to *M. heteropleurum* without realising that King had cited, under his variety, specimens referable both to *M. maingayi* (e.g. Wray 1310) and to *M. Wallichii* (e.g. Kunstler 500).

The species has large flowers, long, elliptic fruits and leaves which dry often olivaceous green below and vary in shape, from broad, shortly cordate to narrow, elliptic-lanceolate, roundedly cuneate at base. These last could easily be mistaken for the leaves of *M. beccarianum* except that these are subsessile and the inflorescence are short, glomerulate in the leaf axils.

**MALAYA:** Perak, Pondok Tanjong (Salleh Cf. 9,710); Tapah (Wray 1310); Lumut (Ridley 9,474); Gopeng (Kunstler 4,726). **Pahang**, Tahan River (Ridley 2,240); Kota Glanggi (Henderson 22,482). **Trengganu**, Berara (Wood 76,072). **Malacca**, Selandor (Alvins 245 as *Pokok Kuku Baning*, & 430 as *Pokok Jambo Baning*). **Johore**, Bukit Tinjau Laut (Ngadiman 36,931); Sungei Kayu (Corner 29,245; 32,311; 32,246; 32,504 & 32,759; Kiah 31,981); Kota Tinggi Road (Corner 28,702); Mersing (Wyatt-Smith 76,278).

**BORNEO:** Tawao (Elmer 21,646).

**SUMATRA:** Mentawi Archipelago, Sipora (Boden-Kloss 14, 743; Iboet 441).



I think we must refer here Krukoff 4,058 from Asahan in Sumatra, cited by Bakhuizen as *M. heteropleurum*.

This species must be compared with the types of *M. excelsum* Bl., which, from the description, comes very close to this.

**26. *Memecylon megacarpum* Furtado nom. nov.**

*M. pulchrum* Cogn. in DC., Mon. Phan. VII (1891) 1141, non. Kurz. (1872 & 1877): **basionymus**.

BORNEO: **Sarawak**, loc. incert. (Haviland 181: b: z: e: m:); Mount Kalulong, alt. 800 m. (Pickles 3,722).

The syntypes were collected by Beccari in Sarawak.

Pickles 3,722, which is represented in the herbaria of Sarawak and Singapore, shows that the early leaves may be broadly ovate to almost rhomboid, shortly petioled or subsessile, with the olivaceous green in the lower surface when dry; later leaves become narrower, elliptic, longer and sessile and show dark brown lower surface. The main lateral nerves which are prominent below in the early leaves become faint in the later ones. The fruit is large, ovate to globose, 1–2 cm. long, crowned with 1–1.5 mm. long calyx limb. Kurz's species is from the adamans.

**27. *Memecylon multiflorum* Bakh. f. in Med. Mus. Bot. Utrecht 91(1943) 343.**

MALAYA: **Singapore**, Bukit Timah (Ngadiman 36,139). **Malacca**, Ayer Panas (Derry 1,184 as Kuku Banning).

BORNEO: **Sarawak**, Gunong Sari in Lawas (Omar 97).

SUMATRA: **Indragiri** (Meyer 4,091); Riouw Archipelago, Sungai Dusun (bb. 31,649); Langkap (bb. 31,648).

There is no authentic specimen in herb Singapore, and the identifications are made entirely from the description.

**28. *Memecylon paniculatum* Jack in Malay Misc. II (1822) 62; reprint in Hook. Comp. Bot. Mag. I (1835) 219 and in Calc. Journ. Nat. Hist. V (1843) 312; Cogn. in DC., Mon. Phan. VII (1891) 1136.**

*M. costatum* Miq. in Verh. Kon. Ned. Inst. (1850) 29; Bl. Mus. Bot. I (1851) 573; Miq. Fl. Ned. Ind. I (1855) 572. Bakh. f. in Med. Mus. Bot. Utrecht 91 (1943) 345.

*M. caloneuron* Miq., Fl. Ned. Ind. Suppl. I (1860) 321; King, Mat. Fl. Mal. Pen. III (1900) 76; Ridl. Fl. Mal. Pen. I (1922) 812.

The syntypes of Jack's species were collected in Sumatra and its lengthy description leaves no doubt what this species was meant.

King mistook some specimens of another species having sessile or subsessile flowers as *M. costatum*, Miq., whereas Miquel described his species as having long pedunculate flowers. The only

specimens that might agree with King's description of the species are *M. wallichii* Ridl. (cf. also Ridley in J. Roy. Asiat. Soc. Str. Br. 79, 1918 p. 75).

I agree with Bakhuizen in considering *M. costatum*, *M. caloneuron* and *M. appendiculatum*, as the same species, but he failed to recognise Jack's plant.

29. **Memecylon wallichii** Ridl. in Journ. Roy. Asiat. Soc. Str. Br. 79 (1918) 74 sub *M. amplexicaule*, & Flor. Mal. Pen. I (1922) 813.

*M. heteropleurum* var. *olivaceum* King, Mat. Fl. Mal. Pen. III (1900) 486 p.p.; Ridl., Flor. cit. I (1922) 814.

*M. longifolium* Ridl. in Journ. cit. 79 (1918) 72, non Cogn. (1891) **syn. nov.**

**MALAYA:** **Penang**, Paya Trobong (Curtis = 965); Moniots Road (I. H. Burkill 2,685 & 3,337); Government Hill (Curtis 965, syntype; Burkill 1,532); Waterloo (Curtis 1,294, syntype); loc. incert. (Curtis 457, syntype); Waterfall (I. H. Burkill 6,579); Pantai Achoh (I. H. Burkill 6,146). **Perak**, Gunong Kledang (Ridley 9,628); Kuala Kangsar (Haniff 14,949); Tapah (Ridley 14,102); Taiping (Ridley 14,687); Lumut (Curtis in Dec. 1902); Prah (Jaamat 39,247); Gopeng (Kunstler 500, syntype of *M. heteropleurum* var. *olivaceum*); Larut (Kunstler 3,058, syntype); Bujong Malacca (Ridley 9,526); Waterfall (Wray 3,278, 2,326 & 1964). **Kelantan**, Sungei Ketch (Henderson 19,581). **Trengganu**, Kuala Trengganu-Besut Road (Sinclair & Kiah 40,858); Ulu Bruang (Moysey & Kiah 33,738 & 33,856).

**BORNEO:** **North Borneo**, Sandakan (Wood, SAN. A. 3,979).

There is a good deal of variation in the leaves of this species so that some are cordulate and sessile while others are rounded and subsessile at base; also some have many prominently developed secondary veins, while in others the secondary veins are few and inconspicuous or faint. A good many specimens of this species were determined by King as *M. amplexicaule*. It is possible that, by *M. costatum* Miq., King intended the larger leafed forms of this species, since he describes the leaves being "thinly coriaceous (drying pale brown with a tinge of yellowish-green), the base rounded or slightly narrowed, not cordate" and the flowers being "crowded in axillary glomeruli" so as to be keyed among the inflorescence that are "sessile or on a very short peduncle." Miquel described the inflorescence of his species as a long, corymbose thyrse shorter than the leaf.

This species must be compared with the type of *M. subtrinervum* Miq., a Sumatran species which, according to cogniaux, also occurs in Sarawak.